



New York City Department of Education

Joel I. Klein

*Chancellor*

# **HIV/AIDS** **CURRICULUM**

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**A Supplement to a  
Comprehensive  
Health Curriculum**



## **NEW YORK CITY DEPARTMENT OF EDUCATION**

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# THE NEW YORK CITY DEPARTMENT OF EDUCATION

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## MESSAGES FROM THE CHANCELLOR AND THE DEPUTY CHANCELLOR FOR TEACHING AND LEARNING

I am pleased to introduce this update to the Department of Education's HIV/AIDS curriculum. This curriculum will provide our students with comprehensive and up-to-date information to help them make informed and responsible decisions. Health education, and in particular HIV/AIDS education, is a crucial component of providing all of our students with the knowledge and skills they need to lead healthy, successful lives. Thank you to the many people whose hard work contributed to this update.

Joel I. Klein  
*Chancellor*

HIV/AIDS continues to be an enormous problem for New York City, the epicenter of the HIV/AIDS epidemic. The Centers for Disease Control and Prevention's Youth Risk Behavior Survey reports that more than half of our high school students engage in behaviors that put them at risk for acquiring this devastating disease.

The entire community needs to play a role in protecting and supporting our youth. Parents need to communicate their values clearly to their children. Communities need to provide young people with a rich, nurturing environment. And schools are responsible for giving students the knowledge and tools they need to make responsible, health-affirming decisions.

This guide is designed to provide accurate information to students concerning the nature of HIV/AIDS, modes of transmitting the disease, and methods of prevention. The curriculum emphasizes abstinence as the only 100 percent effective means of avoiding infection. In accordance with New York State Education Department regulations, parents or legal guardians have the right to exempt their children from lessons that discuss methods of prevention; these lessons focus on abstinence from sexual intercourse and drug use, and correct and consistent use of latex condoms as a way to reduce, but not eliminate, the risk of HIV infection.

The curriculum provides teachers with a comprehensive resource designed both to inform students and to develop their problem-solving and reasoning skills. It is informed by the most current scientific research and includes specific lessons, classroom-based exercises, and other instructional resources.

The New York State Education Department requires that an Advisory Council review the HIV/AIDS curriculum and advise the Chancellor on its content, implementation, and evaluation. This update of the curriculum was developed by staff with the assistance of the Advisory Council and the Department of Health and Mental Hygiene (DOHMH). I thank the Council and members of our staff, as well as DOHMH, for the many hours of work they devoted to this project.

Carmen Fariña  
*Deputy Chancellor  
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# Acknowledgments

This 2005 edition of the *HIV/AIDS Curriculum Guide*, a supplement to the Comprehensive Health Curriculum, is a revision and update to the original *HIV/AIDS Curriculum Guides*.\*

This update, begun by the Health Education Unit of the Office of School Health, was prepared under the supervision of Betty Rothbart, Director, Office of Health Education and Family Living, Division of Teaching and Learning, who was also the chief writer and editor of the original *Curriculum Guides*. The update was initiated under the supervision of Dr. Fred Kaeser, former director, Health Education Unit, with additional leadership by Comprehensive Health Coordinators Julia Choe and Eric Pliner. Other key participants in this update included Victoria Bennington, Michael Buscemi, and Randy Sheiner, Comprehensive Health Coordinators, and Anita Stromsvold. The Hunter College Center for Community and Urban Health provided an initial draft of the update. The original *Curriculum Guides* included contributions by field staff under the supervision of Iris Lopez and Martha Morales, with the participation of Comprehensive Health Coordinators Brenda Dressler, Bruce Groneveldt, William Molbert, Jody Stoll, and Dolores Witherspoon-Cozier.

Additional reviewers from the Department of Education included Regional Superintendents; Carmen Fariña, Deputy Chancellor; Laura Kotch, Executive Director for Curriculum and Professional Development; and Brian Osborne, Chief of Staff, Division of Teaching and Learning. Reviewers from the New York City Department of Health and Mental Hygiene included Dr. Thomas Frieden, Commissioner; Dr. Mary Bassett, Deputy Commissioner, and Linda R. Ojo, Division of Health Promotion and Disease Prevention; Dr. Roger Platt, Assistant Commissioner, and Julia Choe, Bureau of School Health; Anna Caffarelli; and Christina Chang. Reviewers from the Bureau of HIV/AIDS Prevention and Control, DOHMH, included Dr. Scott Kellerman, Assistant Commissioner; Beth Cohen-Barusek; Matt Henn; Maureen Malave; Maureen Miller; Tamar Renaud; Judy Sackoff; and Kent Sepkowitz. From the Bureau of STD Control, DOHMH, Kate Washburn reviewed. We thank the New York City Department of Education's HIV/AIDS Advisory Council Members:\*\*

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\* The original *Curriculum Guides* were published in 1992 (grades K-6), 1995 (7-9), and 1996 (10-12).

\*\* Affiliations listed are those that were in effect during the period in which this curriculum guide was developed.

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# **INTRODUCTORY**

## **S E C T I O N**

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# Introduction

With this updated HIV/AIDS Curriculum Guide, we hope to hasten the day when HIV/AIDS becomes an epidemic of the past. By giving students the information and skills they need to prevent infection with HIV, the virus that causes AIDS, we equip them with the tools they need to cope with a very real threat and to help assure that they will live and love safely for many years to come.

But HIV/AIDS education is not only about how to protect ourselves against HIV infection. We must also help students understand how the tragedy of the epidemic affects our society. We must convey reassurance, compassion, and hope:

- Students need to know that at this stage of their lives, abstinence from sexual intercourse and injection drug use is the safest and most developmentally appropriate choice to protect themselves from HIV infection.
- Students need to be reassured that HIV is not the kind of virus people “catch.” HIV is not airborne; it is blood-borne and sexually transmitted, and students can protect themselves by learning how to avoid behaviors that can lead to HIV infection. This knowledge will not only help them stay healthy; it will enable them to feel comfortable around people with HIV/AIDS.
- Students need to know that there is currently no cure for HIV/AIDS, although some treatments are available that delay or relieve some symptoms of HIV-related illnesses. Scientists are working to discover better treatments. Especially for students who know someone with HIV/AIDS, perhaps a family member, it is important to offer support and to keep hope alive.
- Students need to know that all people with HIV/AIDS should be treated with compassion. Especially for students who know someone with HIV, it is important to clarify that it is risk *behavior* they should avoid, not the *people* who have HIV/AIDS.
- Students need to know that sexual intercourse presents risks of unintended pregnancy and of contracting HIV and other sexually transmitted infections. They need to know that abstinence from sexual intercourse is the healthiest, most appropriate sexual choice for young people. At the same time, they should know that correct and consistent use of a latex or polyurethane condom reduces some of the risks associated with sexual intercourse.
- Students need to know that although sexual intercourse can present risks, sexuality is a natural and healthy part of life. HIV/AIDS instruction should not create unnecessary fears about sexuality and sexual intimacy.

HIV/AIDS education may mean introducing certain topics earlier than some adults would like. We may remember our own childhood years as sheltered and may prefer not to discuss such topics as drug use, sex, sexual intercourse, and condoms in intermediate and junior high school. Yet we cannot help students protect themselves against HIV unless we tell them how HIV is transmitted. We must fight prejudice against those affected by HIV/AIDS by explaining that risk behaviors, rather than membership in a particular group, are what can lead to HIV infection.

School fire drills remind students of the hazards of fire and provide them with an exit plan should a fire occur. It is not necessary to paint a graphic picture in order to teach that fire burns and that fire drills are necessary. Safety rules apply to many areas of life, and students are accustomed to them. The earlier the rules are taught, the more likely they will become second nature. HIV/AIDS education alerts students to another hazard of contemporary life: a virus that can kill as surely as fire. Like fire, the virus does not care about a person's age, race, or sexual orientation. It simply spreads wherever it can. Annual HIV/AIDS instruction reinforces students' awareness of HIV/AIDS, and encourages them to make safer, responsible decisions about risk behaviors that can lead to HIV infection.

**NEW YORK STATE COMMISSIONER'S REGULATIONS**  
**SUBCHAPTER G, Part 135:**  
**HEALTH, PHYSICAL EDUCATION, AND RECREATION**

**Section 135.1 Definitions**

- (j) *Health education* means instruction in understandings, attitudes, and behavior in regard to the several dimensions of health. This instruction relates to alcohol, tobacco, and other drugs, safety, mental health, nutrition, dental health, sensory perception, disease prevention and control, environmental and public health, consumer health, first aid, and other health-related areas.

**Section 135.3 Health Education**

- (a) *Provision for health education.* It shall be the duty of the trustees and boards of education to provide a satisfactory program in health education in accordance with the needs of pupils in all grades. This program shall include, but shall not be limited to, instruction concerning the misuse of alcohol, tobacco, and other drugs.
- (b) *Health education in the elementary schools.*
1. The elementary school curriculum shall include a sequential health education program for all pupils, Grades K-6. In the kindergarten and primary grades, the teacher shall provide for pupil participation in planned activities for developing attitudes, knowledge and behavior that contribute to their own sense of self-worth, respect for their bodies and ability to make constructive decisions regarding their social and emotional, as well as physical, health. Personal health guidance shall also be provided according to the individual needs of pupils. This guidance shall include the development of specific habits necessary to maintain good individual and community health. In addition to continued health guidance, provision shall be made in the school program of Grades 4-6 for planned units of teaching, which shall include health instruction through which pupils may become increasingly self-reliant in solving their own health problems and those of the group. Health education in the elementary school grade shall be taught by the regular classroom teachers.
  2. All elementary schools shall provide appropriate instruction concerning the Acquired Immune Deficiency Syndrome (AIDS) as part of the sequential health education program for all pupils, Grades K-6. Such instruction shall be designed to provide accurate information to pupils concerning the nature of the disease, methods of transmission, and methods of prevention; shall stress abstinence as the most appropriate and effective premarital protection against AIDS; and shall be age appropriate and consistent with community values. No pupil shall be required to receive instruction concerning the methods of prevention of AIDS if the parent or legal guardian of such pupil has filed with the principal of the school which the pupil attends a written request that the pupil not participate in such instruction, with an assurance that the pupil will receive such instruction at home. In public schools, such instruction shall be given during an existing class period using existing instructional personnel, and the board of education or trustees shall provide appropriate training and curriculum materials for the instructional staff who provide such instruction and instructional materials to the parents who request such materials. In public schools, the board of education or trustees shall establish an advisory council which shall be responsible for making recommendations concerning the content, implementation, and evaluation of an AIDS instruction program. The advisory council shall consist of parents, school board members, appropriate school personnel, and community representatives, including representatives from religious organizations. Each board of education or trustees shall determine the content of the curriculum and approve its implementation, and shall be responsible for the evaluation of the district's AIDS instruction program.

*(c) Health education in the secondary schools.*

1. The secondary school curriculum shall include health education as a constant for all pupils. In addition to continued health guidance in the junior high school grades, provision shall also be made for a separate one-half year course. In addition to continued health guidance in the senior high school, provision shall also be made for an approved one-half unit course. Health education shall be required for all pupils in the junior and senior high school grades and shall be taught by teachers holding a certificate to teach health. A member of each faculty with approved preparation shall be designated as health coordinator, in order that the entire faculty may cooperate in realizing the potential health-teaching values of the school programs. The health coordinator shall insure that related school courses are conducted in a manner supportive of health education, and provide for cooperation with community agencies and use of community resources necessary for achieving a complete school-community health education program.
2. (i) All secondary schools shall provide appropriate instruction concerning the Acquired Immune Deficiency Syndrome (AIDS) as part of required health education courses in Grades 7-8 and in Grades 9-12. Such instruction shall be designed to provide accurate information to pupils concerning the nature of the disease, methods of transmission, and methods of prevention; shall stress abstinence as the most appropriate and effective premarital protection against AIDS; and shall be age appropriate and consistent with community values. No pupil shall be required to receive instruction concerning the methods of prevention of AIDS if the parent or legal guardian of such pupil has filed with the principal of the school which the pupil attends a written request that the pupil will receive such instruction at home. In public schools, such instruction shall be given during an existing class period using existing instructional personnel, and the board of education or trustees shall provide appropriate training and curriculum materials for the instructional staff who provide such instruction and instructional materials to the parents who request such materials. In public schools, the board of education or trustees shall establish an advisory council which shall be responsible for making recommendations concerning the content, implementation, and evaluation of an AIDS instruction program. The advisory council shall consist of parents, school board members, appropriate school personnel, and community representatives, including representatives from religious organizations. Each board of education or trustees shall determine the content of the curriculum and approve its implementation, and shall be responsible for the evaluation of the district's AIDS instruction program.  
(ii) Boards of education or trustees that make condoms available to students as part of the district's AIDS instruction program shall:
  - a. submit a condom distribution policy to the advisory council for consideration;
  - b. make condoms available only to students who participate in an appropriate AIDS instruction program as defined in this section;
  - c. provide each student receiving condoms with accurate and complete health guidance as to the risks of disease that may result from the student's use or misuse of such product, which appropriately takes into account the child's age;
  - d. assure that such personal health guidance is provided by health service personnel or school personnel trained and supervised by competent health professionals or health educators; and
  - e. submit for approval by the commissioner a plan for the training of health service personnel, as defined in subdivision (c) of section 136.1 of this Part, or school personnel who will provide such personal health guidance. Such plan shall be approved upon a finding of the commissioner that the training is adequate to prepare such personnel or school personnel to provide the required personal health guidance in an effective manner.

## **REGENTS POLICY STATEMENT ON HIV/AIDS INSTRUCTION**

At its July 25, 1991, meeting, the Board of Regents adopted the following explanation of the Commissioner's Regulation (8 NYCRR 135.3 (C)(2)).

1. The requirement that HIV/AIDS instruction must "stress abstinence as the most appropriate and effective premarital protection against AIDS" means that written and oral instruction on AIDS prevention must devote substantially more time and attention to abstinence than to other means of avoiding HIV infection. It also means that such instruction must always make it clear that no other method of prevention can provide the same 100 percent protection against infection as abstinence can.
2. Among other things, the requirement that HIV/AIDS instruction must "provide accurate information... concerning... methods of prevention" means that any written or oral instruction relating to condoms must fully and clearly disclose the various risks and consequences of condom failure.

# Skills-Driven Curricula: Navigate By the Stars

The New York State Education Department has implemented a health education curriculum and assessment leadership initiative, titled *Navigate by the Stars*. Wherever possible, this curriculum has attended to the ten “Navigational Stars.” The “Stars” are guidelines for curriculum development and implementation. They indicate that a curriculum should be:

- Skills-Driven.
- Standards-Based.
- Science-Based.
- Learner-Centered.
- Strength-Based.
- Authentic.
- Integrated into the Total Educational Program.
- Taught by Qualified, Skilled Teachers.
- Part of a Coordinated School Health Approach.
- Supported by School and Community.

Skills-driven health education is that aspect or domain of education that has been, until now, neglected by most health curricula. Cognitive and affective approaches, though effective at teaching facts and concepts and helpful in shaping healthful attitudes, have not produced the desired effects, those of adaptive behavior changes that promote health. It is widely believed that behavior change requires learning and practicing the skills necessary to form or reshape behavior patterns in addition to cognitive learning and attitude formation. **The Health Education Skills** as outlined by the New York State Education Department and the *Navigate by the Stars* initiative are:

- **Self-Management** Practicing healthful personal habits.
- **Relationship Management** Behaving in ways that promote mutual or group benefit.
- **Stress Management** Recognizing and modifying stress reactions.
- **Communication** Skills of both transmitting and receiving messages.
- **Planning and Goal Setting** Projecting needs and wants and establishing tasks.
- **Decision Making** Choosing in healthful ways based on actual wants and needs.
- **Advocacy** Acting assertively for one’s beliefs.

## New York State Standards for Health, Physical Education and Family and Consumer Sciences

### Standard 1: Personal Health and Fitness

*Students will have the necessary knowledge and skills to establish and maintain physical fitness, participate in physical activity, and maintain personal health.*

### Standard 2: Safe and Healthy Environment

*Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.*

### Standard 3: Resource Management

*Students will understand and be able to manage their personal and community resources.*

Throughout this curriculum, teachers and administrators can see which skills and standards are being focused on in the lesson margins. Also included in the margins are necessary materials and vocabulary words used in the lesson.

For further information on skills-driven health education, see the following Web sites:

New York State Education Department: <http://www.nysed.gov/>

Navigate by the Stars: [www.emsc.nysed.gov/sss/Presentations/Navigate-EditedForWEB.ppt](http://www.emsc.nysed.gov/sss/Presentations/Navigate-EditedForWEB.ppt)

# Examples of Skill Building for Adolescents

Adolescents need both to understand risk-reduction strategies and to develop the decision-making and communication skills to use them.

## Decision Making

Young people need to know the steps to effective decision making, including:

- *Define* the problem and state it clearly.
- *Investigate* information; make sure you have all the facts you need. Ask advice and consult with others as necessary.
- *List* all the possible choices in writing.
- *Evaluate* and write down the pros and cons of each choice, taking into consideration:
  - What is the impact of each choice on your health and well-being?
  - What is the impact on the health and well-being of family, friends, and others involved?
  - Is the choice legal and responsible?
  - Does the choice help or hinder your goals?
  - Is the choice consistent with your family's religious or moral values?
- *Decide* which choice seems best.
- *Outline* the steps to take to act on the decision.
- *Evaluate* the outcome of your decision and make changes, if necessary.

## Communication Skills

Young people need to know how to communicate with others about the decisions they have made, by using such skills as:

- *Assertiveness* – the ability to state a positive view and to maintain that view when opposed or pressured to change it. Assertiveness techniques may include:
  - Stating a strong refusal (expressing a clear no).
  - Giving a good reason (justifying the no).
  - Offering an alternative (presenting a different choice).
  - Taking a caring approach (describing why the no is better for everyone).
  - Stepping back (buying time by delaying a decision).
- *Limit-setting* – the ability to delineate behaviors in which one is and is not willing to participate. Assertively “offering an alternative” can involve limit-setting. (“I am willing to hug and kiss you; I am not willing to have sexual intercourse with you.”)
- *Negotiation* – the ability to confer constructively with another person so as to attain an agreement that is consistent with one's goals and values. (“I want to keep seeing you, but I can only do so if you respect my decision to abstain from sexual intercourse” or “I will have sexual intercourse with you, but only if we use a latex condom every time.”)
- *Refusal* – the ability to say no firmly and consistently in response to someone else's proposal of behaviors that are inconsistent with one's goals and values. (“I do not take drugs, and that's final.”)

Decision-making and communication skills, like all skills, improve with practice. Provide classroom time and activities that will give students an opportunity to practice these skills. Role-plays, reacting to actual or fictitious scenarios and small group discussions can be especially helpful. (See “How to Process Role-Plays” in the Appendix.)



# Guidelines for Teachers and Administrators

In September 1987, the New York State Board of Regents adopted new regulations requiring instruction about Acquired Immune Deficiency Syndrome (AIDS) in Grades K-12 (see page xii). This curriculum guide was developed in response to those regulations. Its purpose is to assist teachers in providing young people with the knowledge, motivation, and ability to carry out responsible decisions related to behaviors that could put them at risk for HIV infection, and to help prepare students to address effectively the impact of HIV/AIDS on their world, today and in the future. The New York City Department of Education's HIV/AIDS Advisory Council has reviewed this document, as has the New York City Department of Health and Mental Hygiene, Bureau of HIV/AIDS Prevention and Control. Council members represent many segments of our diverse community and include educators, religious leaders, parents, students, physicians, and other health, mental health, and social service professionals.

## Guidelines for Implementation

### **CITYWIDE ADVISORY COUNCILS**

Implementing an HIV/AIDS curriculum requires consideration of many viewpoints, a thorough knowledge of content, and a deep understanding of our city's diverse cultural values and beliefs. The regulations adopted by the New York State Board of Regents require local boards of education or trustees to establish an advisory council that will be responsible for making recommendations concerning the content, implementation, and evaluation of an HIV/AIDS instructional program. The advisory council, representing a cross-section of the population, should consist of parents, school board members, appropriate school personnel, and community representatives (including representatives from religious organizations, health organizations, and HIV/AIDS service groups). Youth members may prove helpful. It is strongly suggested that the advisory councils take a comprehensive health approach, examining HIV/AIDS in the context of the entire health instructional program as well as the health needs and resources available in the community.

### **REGIONAL IMPLEMENTATION**

It is advisable that Regional Superintendents select a staff member to coordinate HIV/AIDS educational activities; to serve as a liaison with schools, principals, parents, and community groups; and to help ensure a well-balanced and sequentially developed program on a local level. Schools need to foster an atmosphere in which health issues permeate the various curriculum areas. Such positive immersion can help lead students to choose behaviors that are in their best interest.

### **SUMMARY OF THE NEW YORK CITY DEPARTMENT OF EDUCATION'S HIV/AIDS CURRICULUM GUIDE FOR GRADES K-12**

HIV/AIDS education in the New York City public schools begins in Kindergarten and continues through Grade 12.

In the curriculum for Kindergarten through Grade 3, children contrast being healthy and being ill. They learn to recognize that people—even young children—make choices that affect their health, and to distinguish between healthy and unhealthy choices. They identify how diseases are transmitted, learn how the immune system works, and describe how loved ones and medical caregivers help people get well. They also learn that HIV/AIDS, an infectious disease, disables the immune system.

In Grades 4 to 12, the same concepts are emphasized, and students gain a more in-depth understanding of how the immune system works and how HIV affects it. They learn how HIV is and is not transmitted and how to protect themselves against it. Abstinence from sexual intercourse and drug use is stressed as the only method of prevention with 100 percent effectiveness. Students explore how peer pressure can influence behavior. They identify ways to support each other's healthy choices and to reject pressures to make unhealthy choices. In addition to recognizing the responsibilities and support associated with family, friends, and school, students learn how to locate community resources for HIV/AIDS information. HIV/AIDS is presented as a tragedy that affects all of society, and students are encouraged to regard people with HIV/AIDS with compassion.

### **SENSITIVE AND PERSONAL ISSUES**

HIV/AIDS education deals with issues of interpersonal relationships, sex, drugs, and death. The teacher's capacity to listen perceptively and empathetically and to demonstrate a comfortable attitude in dealing with students' beliefs and feelings associated with HIV/AIDS is crucial to the curriculum's successful implementation. It is important to remember that students come to the classroom with many different values, cultural and religious beliefs, and ideas

about these topics. Teachers should keep in mind that their students come from many backgrounds and traditions, and that many may have difficulty sharing ideas and discussing these issues. Children may come from a variety of familial constructions including those of a mother, father, and children; a single parent or guardian of either sex; step-parents; grandparents; half- or step-siblings; same-gender couples; foster parents; and/or other members of the extended family.

More than one percent of the population of New York City is estimated as being HIV-positive, but the concentration of HIV varies from neighborhood to neighborhood. However, nearly every student in New York City classrooms will have been affected by HIV and some students will be infected. The epidemic should be treated with sensitivity to what may be family and personal experience of chronic disease management, illness, stigma, discrimination, difficult medical regimens, and, in some cases, death and bereavement. Before beginning the program, identify a support person who can assist you if there is a crisis with one of your students. Students should be informed about available school resource people when instruction begins.

It cannot be assumed that all students are heterosexual. Teachers should be sensitive to gay, lesbian, and bisexual students or students who because of gender non-conforming behavior may be perceived as LGBT (lesbian, gay, bisexual, transgender) or questioning, and the isolation and bullying that they often experience. When discussing HIV and its transmission, take care to focus on *behaviors* (e.g., high-risk sexual activities and sharing of needles and other injection drug equipment) rather than on *groups* of people. Avoiding generalizations and stereotyping can help every student in the classroom. HIV/AIDS education may help reduce the problems of racism and bigotry associated with this disease.

**Confidentiality:** Students diagnosed with HIV or AIDS have a right to privacy and a free appropriate public education and are entitled by law to confidentiality about: their HIV/AIDS status; HIV-related illness or AIDS; or information that can reasonably be used to identify an individual as having HIV or AIDS. Disclosure of HIV and AIDS information is governed by the New York State Public Health Law, which went into effect in 1989 (i.e., Section 2782, Confidentiality and Disclosure, and Section 2783 Penalties; Immunities). Willful commission of an unauthorized act of disclosure is a misdemeanor and punishable accordingly; a person is also subject to a civil penalty not to exceed five thousand dollars (\$5,000) for each occurrence of unauthorized disclosure. No disclosure of confidential HIV-related information involving a student shall be made without first obtaining the informed written consent of the student (if he/she has the capacity to consent to such disclosure) or his/her parent or guardian on the form approved by the New York City Department of Health and Mental Hygiene.

**Abstinence:** Refraining from sexual intercourse and drug use is emphasized throughout the New York City Public Schools health curricula. The only sure protection against the sexual transmission of HIV is to abstain from sexual activity. Students need to know that at this stage of their lives abstinence is not only the safest choice, but also the most appropriate to avoid the sexual transmission of HIV, other STIs, and unwanted pregnancies. Students should be given strategies for abstaining from and resisting pressure to engage in early sexual activities outside of monogamous, committed life partnerships or marriages.

The teacher should not assume that students have already become sexually active. Rather, the teacher should stress that whether it means deferring the onset of sexual activity or halting it once it has started, abstinence is the only 100 percent sure way to avoid sexual transmission of HIV.

**Sexuality:** Care must be taken to distinguish between “sexuality” and “sexual intercourse.” Sexuality is a natural and healthy part of life. It is integral to people’s identities as males or females; as family members; as participants in relationships; as members of society. Sexuality can be affirmed, even as abstinence from sexual intercourse is emphasized as the most effective and appropriate means of protection against sexually transmitted HIV. It is important for teachers to emphasize “what a person does” versus “who a person is” when discussing disease transmission. Use accurate language that is acceptable to the community. Remember too that “sex” does not always equal “sexual intercourse.” Kissing and hugging are ways that some young people choose to express sexual feelings and young people can learn to protect themselves by setting limits on their sexual behavior. In order to assess their own behavior, students need to know what activities will or will not put them at risk. Be prepared to answer questions about sex. Always emphasize that students’ bodies are their own and that they should not do anything with which they are uncomfortable or for which they are not ready. Also note that people with developmental disabilities or those who are physically challenged may or may not have the same sexual desires as people in the general population, and may have varying capacities for actualizing them.

**Types of Sexual Intercourse:** HIV can be transmitted through three types of sexual intercourse: vaginal, oral, anal. This curriculum guide recommends that, in high school, the teacher should initiate discussion of these three types. Parents or legal guardians and students should be alerted that parents or legal guardians have the right to ask that their child not participate in the lessons dealing with methods of prevention. A Teacher Note following the first mention of sexual intercourse in each lesson that includes the term provides information for the teacher on why it is important to explain types of sexual intercourse, and also informs the teacher that it is a crime in New York State for an adult to have vaginal, oral, or anal intercourse with a person under 17 years of age. In New York State, a person under 17 years of age is incapable of giving legal consent.

**Child Sexual Abuse:** HIV/AIDS education is important for all students and may be especially relevant for students who have experienced some form of sexual abuse. Such abuse may put students at risk for HIV infection. Listen carefully to comments and questions, as they may signal sexual abuse. Lessons on abuse are part of New York City's comprehensive health education program. If you suspect that a student is being sexually abused, you are required to report it (See Chancellor's Regulation A-750 at <http://www.nycenet.edu/Administration/ChancellorsRegulations/default.htm>).

**Related In-School Courses:** Inform students that HIV/AIDS instruction is part of a comprehensive health education program; allude to other courses that relate to lessons covered in HIV/AIDS education.

**Sexually Transmitted Infections (STIs):** While the primary focus of this curriculum guide is HIV/AIDS, it is important for students to know that HIV is only one of a number of sexually transmitted infections (STIs). Many students are familiar with STIs such as gonorrhea, syphilis, and herpes, yet unfamiliar with STIs such as chlamydia and human papillomavirus (HPV). Students should be aware that:

- *Many STIs can be cured, but early diagnosis and treatment are crucial, just as they are for HIV.* Some STIs can be difficult to diagnose early because they may be asymptomatic (i.e., they present no symptoms) in some individuals. For example, gonorrhea and chlamydia are asymptomatic in most women and some men. HIV infection is associated in a majority of cases with a flu-like illness concurrent with seroconversion about three weeks to three months after infection. This passes and the person with HIV may experience some symptoms associated with fighting infection: swollen glands, night sweats, fatigue. These could easily be mistaken for minor ailments or illnesses. The more serious symptoms of HIV associated with AIDS may not appear for ten years or more even when HIV is untreated. In fact, estimates in 2004 suggest one out of four of persons with HIV are untested; and one out of four of those who test positive qualify for a diagnosis of AIDS at the time of testing.
- *STIs can be transmitted to sexual partners even if an infected person has no symptoms of disease.* STIs can be transmitted through vaginal, oral, or anal intercourse.
- *Some STIs can cause infertility.* For example, chlamydia is often symptom-free. If untreated, it can "silently" damage women's and men's reproductive organs, causing infertility.
- *STIs that cause sores, rashes, blisters, or lesions can increase the risk of HIV infection by presenting openings in the skin through which HIV could pass.* Examples of such STIs are herpes and syphilis.
- *STIs can be transmitted to a fetus during pregnancy or childbirth.* HPV, gonorrhea, herpes, nongonococcal urethritis, and syphilis can all be passed from an infected woman to her baby during childbirth; HIV can be transmitted in the womb, during childbirth, or during breastfeeding. It is important to know that treatments for mother and child and procedures during birth have made perinatal transmission of HIV quite rare.
- *Some STIs, such as herpes, HPV, and HIV have no cure.*
- *Some STIs can be cured, but can cause severe damage and even death if they are not treated or if treatment is delayed.* For example, untreated gonorrhea can cause heart disease, skin disease, arthritis, and blindness; untreated syphilis can cause brain damage, blindness, and death.

**Condoms:** For people who are sexually active, using condoms is the best way to prevent HIV. Most people who are HIV-positive do not look sick, and one in four people living with HIV in the United States today does not even know that he/she is infected. Because it is not possible to tell if someone is HIV-positive just by looking at him or her, it is important to use a condom every time you have sex with someone who has not been tested in the past three months. Yet it is also true that not everyone will report accurately about testing results or about any risk behaviors since testing occurred. Using a condom every time protects you from infection and helps give you peace of mind. Only FDA-approved latex or polyurethane condoms should be used.

Condoms are the most effective way to prevent HIV transmission among sexually active people. A review of 13 condom studies found that people who said they **never** use condoms were six times more likely to get HIV than those who said they **always** used condoms when having sex with HIV-positive people.\* The primary reason that condoms fail to protect against HIV is improper use, putting the condom on too late or incorrectly. It is therefore very important to learn when and how to put on a condom. This curriculum refers high school students to the school's Health Resource Room(s) for a condom demonstration.

- Some ways people use condoms INCORRECTLY, causing them to fail, include:
  - Improperly putting on or removing a condom.
  - Using an oil-based lubricant, which damages latex condoms, instead of a water-based lubricant.
  - Using a lambskin condom, which can permit the passage of HIV, instead of a latex one.
  - Having inadequately lubricated intercourse, especially anal, during which friction can stress and break the condom.
  - Inadvertently tearing the condom on fingernails or jewelry or when opening the packet.
  - Using a condom that has been stored near a heat source (greater than 80° Fahrenheit).
  - Using a condom after the expiration date on the package.
  - Reusing a condom.
  - Using a condom from a broken packet.

In the 1990s, it was recommended that foams, gels, lubricants, or creams with nonoxynol-9 (N-9) be used with condoms. N-9 is a spermicide that helps prevent pregnancy and has some protective action against the germs that cause some sexually transmitted infections. In vitro (test tube) studies had suggested that N-9 had some effect on HIV. Large scale in vivo (studying people who used N-9) studies demonstrated that frequent use of N-9 irritated sensitive membranes (such as in the rectum and vagina) and actually created a “port of entry” for HIV. Similarly, use of the contraceptive sponge was found to make small scratches that could facilitate infection with HIV. *For this reason, the CDC no longer recommends the use of condoms with nonoxynol-9 as an effective method of HIV prevention.* However, using water-based lubricants can help reduce friction and breakage and is recommended.

This curriculum covers how to maximize condom effectiveness. Lessons emphasize that the decision to use condoms demands a sense of responsibility to oneself and to others and the ability to recognize and evaluate behavioral consequences. While properly used condoms can reduce the risks associated with sexual intercourse, abstinence is the healthiest and most appropriate choice for students.

- The **female condom** is a *polyurethane* (not latex) sheath that loosely lines the vagina and covers the outside vaginal area. It has thin, flexible rings at either end. The inner ring anchors the female condom behind the pubic bone and the outer ring lies outside of the vagina. It comes pre-lubricated (oil-based) and can be inserted before intercourse, without male participation. The polyurethane is not compromised by oil-based lubricant or high temperatures, and is stronger than latex. The female condom has been reported as having similar rates of effectiveness in preventing STIs and pregnancy as the male condom when used correctly and consistently. However, rates of correct and consistent use with the female condom appear to be lower than with the male condom. This may be due to inexperience with proper insertion and usage. Male condoms and female condoms should NEVER be used together; this can increase friction and break down the latex (because of the oil lubricant on the female condom), reducing the effectiveness of both, AND/OR make them stick to each other, causing slippage/displacement. It should be noted that the female condom is about five times the cost of the male condom and may not be available through free condom programs and retail stores. However, it is available at all NYC DOHMH District Public Health Offices and STD Clinics (location information at [www.nyc.gov/html/doh/html/std/stdfree.shtml](http://www.nyc.gov/html/doh/html/std/stdfree.shtml)).

\* Weller, S.; Davis, K. Condom effectiveness in reducing heterosexual HIV transmission (Review). The Cochrane Collaboration. 2005.

**Death and Dying:** Teachers should keep in mind that some students or their family members and/or acquaintances may be HIV positive, may be living with AIDS, or may have died of AIDS. For these students, the issues of bereavement and grieving are real. It is not unusual for students to deny the issue of death in their lives and/or to act out their feelings, sometimes in negative ways. Before beginning the HIV/AIDS lessons, identify a support person who can assist you if there is a crisis with one of your students. Students should be informed about available school resource people when instruction begins.

## Classroom Resources

**Audiovisuals:** If audiovisuals are being planned for classroom presentation, choose and review materials at least 72 hours in advance, and follow Department of Education policies. Large auditorium or gym presentations should be avoided since they do not lend themselves to effective discussion and processing of the sensitive issues covered in this curriculum.

**Guest Speakers:** Guest speakers from community agencies can be a valuable resource for the classroom instructional program. When considering the involvement of community agencies, schools should receive complete assurance that the presentation will be made in an accurate and objective manner and will respect the religious and cultural values of pupils in the class. Teachers must obtain approval from their principal before inviting a guest to speak about HIV/AIDS or related topics. They should meet or talk by phone with the guest speaker in advance to determine appropriateness for the grade level, and examine all materials with the principal at least 72 hours prior to the presentation.

**Presentations by People Living with HIV/AIDS:** Inviting people living with HIV or AIDS into the classroom can be an effective teaching strategy. Do not refer to people living with HIV or AIDS (PLWHA) as victims. Victims are generally regarded as powerless, and it is important to respect the importance of using one's personal experiences and power to educate others. If a PLWHA is invited to the classroom, it should not be to sensationalize the illness or scare students. PLWHAs should emphasize the hope as well as the challenges of living with HIV/AIDS, an approach that will help students who may have relatives with HIV infection or AIDS, or are infected themselves. Again, always preview the workshop and the materials before the classroom presentation as per New York City Department of Education policies.

Students should be informed of available school resource people, e.g., guidance counselors, social workers, health professionals (nurses, health aides), or substance abuse prevention and intervention specialists (SAPIS).

**Parent-Teacher Involvement:** Involvement and participation of parents and teachers in program planning and implementation is important. Under the guidance of principals and coordinators, parents and teachers should be encouraged to attend community workshops in which they preview instructional materials. Parent focus groups have suggested that the New York State Education Department regulations requiring HIV/AIDS instruction in Grades K-12 be visibly posted in every school.

**Parent Workshops:** Parent workshops can be extremely helpful in developing a better understanding of the HIV/AIDS education program. These workshops should involve parents or legal guardians in open and supportive discussions; provide parents with accurate information; and help parents communicate their own values about drugs and sexuality more clearly and effectively to their children. Open communication between parents or legal guardians and children can help youngsters make informed decisions about their behavior.

**Parental Excuse from Prevention Instruction:** Parents or legal guardians should be notified that HIV/AIDS lessons will be taught. Students may be exempted from instruction concerning the methods of preventing HIV infection if the parent or legal guardian files a written request with the school principal asking for the student to be exempted from *that phase* of the instruction. The parent or legal guardian must give an assurance that such instruction will be provided at home. Requested materials will be provided for home instruction. An HIV/AIDS Education notification sample letter is provided as Appendix I.



# HIV/AIDS Prevention Lessons

GRADE AND LESSON	LESSON TITLE
Grade K • Lesson 4	How Do People Get Sick? What is HIV? What is AIDS?
Grade 1 • Lesson 3	What Are Viruses? How Do They Enter the Body to Cause Disease?
Grade 2 • Lesson 3	What Causes and Prevents the Spread of Illness?
Grade 3 • Lesson 4	What Are Healthy Choices That People Can Make?
Grade 4 • Lesson 4	How Can We Help Each Other Make Healthy Choices?
Grade 5 • Lesson 3	How Can We Reduce Our Risk Behaviors?
Grade 6 • Lesson 5	How Can We Prevent HIV Infection?
Grade 7 • Lesson 3	How Can Abstaining from Alcohol and Other Drugs Prevent HIV Infection?
Grade 7 • Lesson 4	How Can We Protect Ourselves from Sexual Transmission of HIV and Other STIs?
Grade 7 • Lesson 5	How Can People Express Love and Affection and Still Be Sexually Abstinent?
Grade 8 • Lesson 3	How Can Abstaining from Alcohol and Other Drugs Prevent HIV Transmission?
Grade 8 • Lesson 4	How Can People Distinguish Among the Desires for Emotional Intimacy, Physical Intimacy, and Sexual Intercourse?
Grade 8 • Lesson 5	How Can One Prevent Sexual Transmission of HIV?
Grade 8 • Lesson 6	What Role Can Each Person Take in Preventing the Spread of HIV Infection?
Grade 9 • Lesson 3	How Can Young People Set Limits and Make Healthy Decisions About Sexual Activity and Abstinence?
Grade 9 • Lesson 4	How Is Abstinence from Sexual Intercourse Both a Health Decision and a Reflection of Values?
Grade 9 • Lesson 5	How Can Abstaining from Drugs, Including Alcohol and Steroids, Reduce the Risk of HIV Infection?
Grade 9 • Lesson 6	How Can Sexual Transmission of HIV Be Prevented?
Grade 10 • Lesson 4	What Are the Advantages of Sexual Abstinence?
Grade 10 • Lesson 5	How Can We Reduce Our Risk of Transmission of HIV or Other STIs?
Grade 11 • Lesson 4	How Can We Reduce Our Risk of Getting or Transmitting HIV Infection or Other Sexually Transmitted Infections (STIs)?
Grade 11 • Lesson 5	What Is the Role of Abstinence in Preventing Infection with HIV and Other Sexually Transmitted Infections (STIs)?
Grade 12 • Lesson 5	How Can We Reduce Our Risk of HIV Infection?

## **EXPLANATION OF NEW YORK CITY PUBLIC SCHOOLS' EXPANDED HIV/AIDS EDUCATION INCLUDING CONDOM AVAILABILITY PROGRAM**

**NOTE: Condom Availability is for *High Schools Only***

Since 1987, New York State Education Commissioner's Regulations have required every school district in the state to provide instruction to students in every grade about the nature of HIV infection, methods of transmission, and methods of prevention. The information must be accurate, age-appropriate, and consistent with the community's values. Abstinence from sexual intercourse must be stressed as the most appropriate and effective protection against HIV infection. Parents or legal guardians can file a written request with the principal to exempt their children from the lessons on methods of prevention if they agree to give their children such instruction at home.

In Kindergarten through Grade 6, students are given five lessons on HIV/AIDS each year. All junior and senior high schools in New York City must teach at least six HIV/AIDS lessons in every grade.

Since 1991, New York State Regulations have also permitted school districts to set up programs to make condoms available to students who participate in the instructional program, once they ensure that students have been provided with comprehensive guidance about their personal health risks in using condoms and that condoms are provided by trained and adequately supervised school or health service personnel. In February 1991, in response to statistics showing that New York City teenagers were at high risk of being infected with HIV, the New York City Board of Education approved a policy to expand and improve its HIV/AIDS education program. The expanded program included a comprehensive new HIV/AIDS curriculum for all grades; an HIV/AIDS education team in every high school, which included students, parents/guardians, and faculty; an HIV/AIDS information session for parents/guardians of high school students; and a condom availability program for high school students.

Latex condoms are made available in every high school by trained male and female volunteer staff members in "Health Resource Rooms" (designated rooms in the school open ten or more periods each week at set times), and through school-based health clinics. Parents or legal guardians have the right to request that their children be exempted from the condom availability program. Their children's identification numbers are placed on a list (names are not included) to ensure that they will not participate. For all other students, the program is confidential and students are not required to identify themselves by name or to prove that they have permission from their parents to use the resource room. Any student who has permission to use a health clinic can receive condoms there in the same manner. Counseling and referrals are provided to any student who accepts them when offered or who asks for them, but students are not required to receive counseling in order to receive a condom. When students request condoms, they have access to written instructions on correct condom use. Each high school HIV/AIDS education team plans the health resource room schedule. The condoms are donated by condom manufacturers.

# Responding to Students' Questions

- Listen carefully.
- Provide direct and honest answers.
- Check back with the student: "Does that make sense to you?" "Does that answer your question?" It is legitimate to say the following and be sure to always follow through:
  - "I'm not sure. I will find out and get back to you."
  - "Let's talk about this after class so that I can have enough time to explain it to you."
- Check back again: "Let's see if I explained that well. Can you answer the question for us now?"
- If you hear students telling derogatory jokes or ridiculing people with HIV/AIDS, or the concept of AIDS in general, openly discourage these negative attitudes. Emphasize that jokes about HIV/AIDS stigmatize people with the disease. It is everyone's responsibility to be compassionate toward people affected by HIV/AIDS.
- The topic of HIV/AIDS often brings up issues of sexual orientation. In accordance with the New York City Department of Education's Resolution, Statement of Policy on Multicultural Education and Promotion of Positive Intergroup Relations, remind students that all people deserve respect and to be treated fairly. Remind students that a bias against lesbian, gay, bisexual, transgender, and questioning people is just as serious and damaging to society as a racial, ethnic, or religious bias, and that expression of harassment or discrimination of any kind will *not* be tolerated in school.
- The topic of HIV/AIDS often brings up issues related to injection drug use. It is important to stress the danger of injection and non-injection drug use in relation to HIV/AIDS and to a student's general physical and mental health. At the same time, it is important to keep in mind the social factors that lead people to drug use. Stress that individuals who are drug-dependent are in great need of ongoing treatment and societal support to deal successfully with their drug-dependence problems. They need to be supported and encouraged as they learn to make more life-affirming choices and to avoid destructive behaviors.



# Answers to Questions Students May Ask About HIV and AIDS

Q: How do people “catch” HIV?

A: HIV is not the kind of virus that people easily “catch.” HIV, the virus that causes AIDS, is present in blood, semen, vaginal fluids, and breast milk of people who are infected. The only way the virus can spread from one person to another is if these infected fluids get into another person’s body. The virus can be transmitted through sexual intercourse with an infected partner; through the sharing of needles, syringes/works/skin-popping equipment with an infected person during use of drugs (including steroids); and from an infected pregnant woman to her fetus or to her child during childbirth or through breast milk. However, the possibility of transmission from these different methods varies greatly. Mother to child is an efficient mode of transmission, but now through treatment and advising HIV-positive women against breastfeeding, the risk of perinatal transmission has been significantly lowered.

Q: Can you get HIV if someone coughs on you?

A: No. HIV is not spread through the air. It is not spread by coughing, sneezing, sitting near someone, sharing food or drink with someone, shaking hands, hugging, or touching something an HIV-positive person has touched.

Q: Will I get HIV?

A: Although anyone engaging in high-risk behaviors can get HIV/AIDS, we are all capable of stopping the spread of HIV. The purpose of HIV/AIDS education is to provide you with the facts so that you can keep yourself healthy. (After hearing about transmission, if a student is still concerned that he or she has HIV, the student should talk to a parent, teacher, counselor, or doctor.)

Q: What is the difference between HIV and AIDS?

A: HIV (Human Immunodeficiency Virus) is a virus that attacks and weakens the body’s immune system, making infected people potentially vulnerable to other diseases. An HIV-positive person may have a brief flu-like illness starting three weeks to three months after infection. He or she may have other general symptoms of infection (night sweats, swollen glands, fatigue) once in a while. However, many people have few or mild symptoms for as long as ten years or more, even if untreated. AIDS (Acquired Immune Deficiency Syndrome) is not a specific disease, but rather is a collection of related bodily signs and symptoms (syndrome) that occurs in the advanced phase of HIV infection. AIDS is defined by a series of clinical criteria formulated by the Centers for Disease Control and Prevention. Unless an HIV-positive person shows symptoms that meet these criteria, he or she does not have AIDS. These criteria include a diagnosed HIV infection and the presence of one or more of 26 opportunistic infections and clinical conditions, or a T-cell/CD4 cell count below 200 per cubic millimeter of blood. People with HIV infection develop AIDS over varying lengths of time.

Q: If I have friends with HIV/AIDS, can I still hang out with them?

A: Yes. You cannot get HIV/AIDS from casual contact with an infected person. You can hug, touch, and kiss your friends. You can eat meals with them. You can talk with them, hang out with them, play games with them, and go to the movies. Sometimes people with HIV/AIDS feel very alone. Friends and family are very important to all of us.

Q: Does everyone who has HIV/AIDS die from it?

A: No. While currently there is no cure, new medical treatments for HIV infection and AIDS have been able to significantly reduce the amount of HIV in an infected person’s body. This means that many people with HIV infection and some people with AIDS can live normal lives for many years. Indeed, these new medications mean that for many people, infection with HIV is becoming a more manageable long-term illness.

Q: Can I get HIV from a blood transfusion?

A: Today, although the blood testing process is not infallible, the chances of anyone becoming infected from a blood transfusion in the United States are remote. Since 1985, the hospital blood supply in New York City has been carefully screened for HIV antibodies and donors screened for risk behaviors. In 1999, many blood banks in the United States began screening blood for the presence of HIV (rather than antibodies). Still, some people who are scheduled for elective surgery choose to donate their own blood so that they can receive it should a transfusion be necessary during their operation.

Q: Can I get HIV from a healthcare provider?

A: The risk of becoming infected from contact with an HIV-positive healthcare provider is remote.

The CDC (Centers for Disease Control and Prevention) has recommended the use of universal precautions by healthcare workers to minimize the risk of transmitting many diseases, including HIV and Hepatitis. These precautions include general infection control methods (e.g., hand washing), use of a barrier (e.g., latex gloves), proper disposal of “sharps” (e.g., syringes), and other methods that prevent the contact of potentially infectious agents from one person with the skin or mucous membranes of another. The risk of transmission from patient to healthcare worker is far greater than from worker to patient.

Q: How can I help in the fight against HIV and AIDS?

A: Students can play very important roles. The most important is that they educate themselves as much as possible about how HIV is transmitted and how it is not transmitted. They should personally choose to abstain from sexual intercourse and drug use, and encourage others to do the same, or at least to practice risk-reduction methods. They can initiate discussions with parents, legal guardians, and other caregivers, and share what they have learned. They can fight bias against people with HIV/AIDS by treating them with respect, recognizing that while some may have special needs, all are just people trying to live their lives as normally as possible. They might also volunteer to help a person with HIV/AIDS and his or her family. They can work with other young people in peer-education programs that educate young people about HIV/AIDS. They can volunteer their time with community-based HIV/AIDS service organizations or go into the helping professions (education, health, etc.).

# How to Use This Curriculum Guide

New York City public schools are mandated to provide a minimum of five HIV/AIDS lessons per year to students in Grades K-6 and six HIV/AIDS lessons per year to students in Grades 7-12. Each of this guide's six lessons for Grades 7-12 comply with the New York State Education Commissioner's Regulations requiring that students be taught about the nature of HIV/AIDS, the methods of transmission, and the methods of prevention, and that abstinence be stressed as the most effective and appropriate method of prevention. These lessons also focus on risk-reduction skill building, on HIV/AIDS resources and services, and on the impact of the HIV/AIDS epidemic in our society. Please note that some lessons may be taught over more than one class period.

Magnify the impact of the lessons by giving students ample opportunities for review, reinforcement, reflection, and practice of risk-reduction skills. To help you expand your HIV/AIDS instructional program, this guide includes additional optional lessons (including information on peer education), teaching strategies, and vocabulary and concept-building activities, as well as classroom guides and a teacher's glossary.

**Instructional Program for Special Education:** Special education teachers are included in staff development programs related to HIV/AIDS instruction and are assisted in adapting the curriculum whenever necessary.

Some people with developmental disabilities have cognitive limitations that require a multi-sensory mode of learning. They may not understand abstract concepts; rather, concepts must be concretized. The materials used need to be modified to the cognitive levels of these students, and the lessons must include their active participation. With this in mind, examine the lessons carefully before attempting to teach students with disabilities. Such preparation will help ensure that students will understand how to protect themselves from HIV infection.

## How to Reinforce HIV/AIDS Lessons All Year Long

Because HIV/AIDS is such an important issue for students, a teacher may reinforce HIV/AIDS lessons beyond the required number of lessons. Some ways to do this are:

- Teach one or more of the optional lessons, strategies, and activities in this guide.
- Review HIV/AIDS facts with periodic question-and-answer games, myth-fact activities, and quizzes followed by discussion, and student-generated questions.
- Have a question box in the classroom so that students can submit questions anonymously. Periodically, share questions with students and ask them to answer when appropriate. Review questions privately and prepare answers prior to going through them with the class. Rephrase questions for clarity, if inappropriate language is used, or if a student's phrasing may breach the student's or someone else's confidentiality.
- Ask students to bring in HIV/AIDS-related newspaper and magazine articles, advertisements, and anecdotes to promote discussion of sexual choices. Specify the names of acceptable periodicals in order to ensure that no inappropriate materials are shared. Encourage students to discuss why abstinence is the safest and most appropriate choice young people can make and to support one another in that decision.
- Have students engage in role-playing and other expressive activities that teach and reinforce decision-making and assertiveness skills. Opportunities to use such skills confront students every day. Students need ample practice and support to strengthen these vital skills. Utilize appropriate, effective videos that reinforce abstinence, discuss risk-reduction methods, and promote attitudes and values for positive behavior. A list of videos, approved by the HIV Materials Review Committee, is available from the Office of Health Education and Family Living.

**Teacher Note:** Role-playing is an effective way to help students internalize and express risk-reduction concepts. See Appendix B, "Classroom Guides," for tips on how to process role-plays. Ask another teacher for assistance if you are not comfortable or experienced with facilitating role-plays.

- Have students make a year-long dynamic project of a bulletin board display or mural about medical advances in treating HIV/AIDS. Especially for students who have a relative with HIV/AIDS or who are themselves infected, this can be an ongoing source of hope.
- Establish a productive relationship with a qualified community-based organization that helps people with HIV/AIDS. Invite its representatives to speak to your students about HIV/AIDS resources in the community. (See Appendix B, “Classroom Guides.”) In turn, work with the organization to involve students in an ongoing volunteer project, such as visiting, letter writing, or collecting donations of clothing or food for people with HIV/AIDS. Not only can such activities give students the satisfaction of helping others, they can also acquaint students with resources in their own community that could be valuable to their own families and friends.
- Keep students in touch with current local, national, and international events pertaining to HIV/AIDS. Encourage students to discuss, debate, and write letters to officials about such issues as HIV testing, abstinence, condom availability in high schools, and the need for increased funding of drug rehabilitation programs and HIV/AIDS support programs.
- Encourage students to educate their peers by creating theater pieces, posters, or classroom presentations. Peer education can be a powerful way to harness peer pressure as a positive force. In fact, young people who teach their peers are more likely to modify their own behavior to avoid HIV.
- Have students read poems, articles, or stories that deal with HIV/AIDS issues in order to enhance their knowledge, interest, concern, and vocabulary.
- Have students write their own poems, articles, stories, stage or radio plays, rap songs, etc.
- Assign HIV/AIDS Vocabulary and Concept-Building Strategies (see special section following lesson plans) for homework or as in-class or small-group activities, either in conjunction with HIV/AIDS lessons or to reinforce HIV/AIDS concepts throughout the school year. Students may also enjoy making up their own vocabulary-building games.

## Teachers Can Help Save Lives

Teaching students about HIV/AIDS can be one of a teacher’s most valuable contributions to their lives. Especially during a time when many young people may be, or are likely to become, sexually active, teachers can help them to challenge the assumption that having sex signifies maturity, and to affirm that learning to behave responsibly is the key to maturity. Whatever teachers’ personal feelings are, they should recognize that HIV/AIDS education is not only necessary, but can be a positive learning experience.

Abstinence, because it protects students from HIV, other sexually transmitted infections, and unintended pregnancy, is the most responsible and appropriate choice for young people. If students have had sexual intercourse, they can choose to be abstinent until they are in a mutually monogamous, faithful, adult relationship. Similarly, help students understand that avoiding alcohol and other drugs is crucial to healthy living and avoiding HIV infection.

The HIV/AIDS epidemic touches all students’ lives. Use this guide to help them make sense of a sometimes frightening issue and to help prevent them from becoming infected themselves.

Request further training, assistance, or copies of HIV/AIDS-related regulations from the New York City Department of Education’s Office of Health Education and Family Living. Please share comments and suggestions on this curriculum guide to facilitate revision of future editions.

Write to:

The New York City Department of Education  
Office of Health Education and Family Living  
*HIV/AIDS Curriculum Guide*  
52 Chambers Street, Room 215  
New York, NY 10007

# Facts About HIV Infection, Prevention, and Treatment

This brief overview provides general information on HIV infection and AIDS, and should be supplemented as needed with other texts on the subject. Since knowledge about the disease and its effects on individuals is continually being updated, administrators and teachers should periodically review and update this information to ensure that it is accurate. The New York City Department of Health and Mental Hygiene (<http://www.nyc.gov/html/doh/>) provides New York City data and the New York State Department of Health (<http://www.health.state.ny.us/>) provides data for New York State. Both provide many resources on prevention and treatment designed for the general public. (See also “Resources” in Appendix E.)

**Certain terms used in this overview may be unfamiliar to some readers. While some terms are defined here, readers should also consult Appendix D, “Teachers’ Glossary,” for further explanation or for explanation of terms not defined here.**

## Description of HIV Infection and AIDS

- HIV (Human Immunodeficiency Virus) is a virus that impairs the body's immune system (the body's internal defense against diseases). It primarily targets certain white blood cells (called T-lymphocytes, Helper T-cells, or CD4 cells) that are a specific part of the immune system. If untreated, HIV can advance to AIDS (see below). Illnesses that may occur during AIDS may affect every organ system and impair the central nervous system.
- HIV infection is the condition of being infected with HIV, but with an immune system that is still moderately strong.
- AIDS (Acquired Immune Deficiency Syndrome) is the advanced phase of HIV. It is not a specific disease itself, but rather a syndrome or collection of bodily conditions or health problems caused by HIV, and defined by a series of clinical criteria formulated by the Centers for Disease Control and Prevention. These criteria include a diagnosed HIV infection and the presence of one or more of 26 opportunistic infections (see next bullet) and clinical conditions, or a T-cell/CD4 cell count below 200 per cubic millimeter of blood. People with HIV may eventually develop AIDS, but will develop it over varying lengths of time.
- Because the immune system of people with HIV has been moderately weakened, it is still able to fight off a number of infections. However, the immune system of people with AIDS has been severely weakened. Therefore, people with AIDS are vulnerable to specific diseases that rarely affect healthy adults. These are called opportunistic infections and include illnesses such as pneumocystis pneumonia (PCP), severe yeast infections, cytomegalovirus, herpes zoster, tuberculosis, toxoplasmosis, other parasitic infections, and certain cancers, such as Kaposi's sarcoma. It is important to note, however, that many medications are now available that can reduce, although not eliminate, the amount of HIV in an infected person's body, thereby allowing a person with either HIV or AIDS to live a normal life for a long period of time. It is for this reason that HIV is now considered by some to be a manageable long-term condition.

## Spectrum and Course of HIV Infection and Disease

Untreated HIV infection passes through a series of phases. Phases are:

- Acute Phase (Primary HIV Infection) – from exposure and infection to development of antibodies, often accompanied by flu-like symptoms.
- Asymptomatic Phase – literally means “without symptoms”, though the person may experience a few symptoms, such as fatigue, swollen glands, and night sweats, and other signs that accompany most infections.
- Symptomatic Phase – vulnerability to common illnesses (like colds) and additional symptoms (like weight loss, diarrhea). Person may experience first hospitalization.
- AIDS – accompanied by symptoms due to the direct effects of HIV infection, such as wasting syndrome, along with symptoms from opportunistic infections.

Individuals vary considerably in how quickly they pass through these phases. In any phase, treatment can slow the progress of the disease considerably. In 1996, the introduction of Highly Active Antiretroviral Therapy (HAART) changed the lives of many people with HIV or AIDS. HAART dramatically slowed the progression toward AIDS and decreased the death rate.



- Because the symptoms after infection are fleeting or vague, many people with HIV are unaware they have even been infected. The CDC estimates one in four people with HIV are untested; and one in four who test positive find out that they have already progressed to AIDS at the time of their first diagnostic test for HIV.
- The time from infection to appearance of significant symptoms or HIV-related illnesses varies significantly from person to person. Since AIDS was only recognized in 1981, the maximum asymptomatic period has yet to be identified.
- HIV is infectious throughout its course. Individuals infected with HIV are capable of infecting others, even if they have no symptoms or do not know their own HIV status. This means that all people should take appropriate precautions to protect themselves and others from potential HIV transmission.

## Transmission

Unlike flu or measles viruses, HIV is not transmitted through the air. To cause infection, HIV must be transmitted directly into the bloodstream or through a mucous membrane from an infected person to a non-infected person. For this reason, HIV-positive people do not pose a risk to others through any form of casual contact. There is no evidence that HIV is contracted through coughing, sneezing, food preparation, mosquito bites, drinking fountains, toilet seats, being around an infected person, or when a noninfected person donates blood.

- HIV is found primarily in the following four body fluids of an infected person:
  1. Blood, including menstrual blood.
  2. Semen and preseminal fluid, the clear fluid that appears on the penis after it is erect but prior to ejaculation. (This is sometimes referred to by the slang term “pre-cum.” Encourage students to use correct terminology.)
  3. Vaginal fluid.
  4. Breast milk.

Other body fluids, including tears and saliva of an infected person, may contain scientifically detectable traces of the virus but do not contain enough of the virus to transmit it from one person to another.

- HIV can be transmitted from one person to another by any route that brings one of the above four body fluids into contact with the blood or mucous membranes of another person. The three major transmission routes are:
  1. Sexual intercourse: penile/vaginal, oral (mouth to penis or mouth to vagina), and penile/anal. Sexual transmission of HIV occurs by absorption of infected semen, blood, or vaginal fluid through mucous membranes and abrasions (tiny unfelt scratches or tears in delicate tissues during sexual intercourse).

Within the category of sexual transmission, there are differences in likelihood of transmission during any unprotected sexual act. Anal intercourse is the highest risk sexual behavior, meaning that it is the most likely mode of sexual transmission, whether it occurs between a man and a woman or between a man and a man. Because the anal mucosa is fragile, tissue tearing and bleeding frequently occur, although they may not always be noticed. Lymphatic tissue occurs all along the digestive tract, thus there are concentrations of T-cells, one of HIV’s favorite targets, near the anus. Vaginal/penile intercourse poses risk to both men and women, but it has been documented that women are more at risk than men, physiologically because of the more delicate tissue in the vaginal area, especially younger women whose cervixes are not fully formed and older postmenopausal women who may have experienced some thinning of the vaginal lining.

2. Exposure to infected blood. This occurs primarily through injection of drugs whether intravenously, intramuscularly, or under the skin. HIV can be transmitted by an infected person during use of syringes or needles or other equipment used by injectors (cotton, cookers, drug solution, and water) for drug injection. When people inject drugs, including steroids or hormones, small amounts of blood can remain in the needles, syringes, or other paraphernalia used in drug preparation. If these are then used by another person, HIV-infected blood can be injected into the next user’s bloodstream.

Though much less likely, transmission may also occur through contact with open sores or cuts.

3. Perinatally, from an infected woman to her child(ren) during pregnancy, childbirth, or breastfeeding. However, transmission from an HIV-positive woman to her child through pregnancy, childbirth, or breastfeeding can be prevented. If a pregnant woman is under a doctor’s care, the doctor should see that she gets counseling and testing for HIV. If she is HIV-positive, the doctor will see that she gets medicines during her pregnancy and special procedures during labor and delivery (e.g., washing of the birth canal) that will reduce

the potential for HIV transmission to her child. The infant should also receive medications after it is born. The baby is usually given formula instead of being breastfed, as there is a possibility of transmission through breast milk. In fact, in some countries where breastfeeding is common, one-third of the mother-to-child transmission is through breastfeeding, posing difficult choices especially in countries where there are few supplements with the nutritional and protective value of breast milk.

Preventing transmission from HIV-positive women to their children is one of the “success stories” of HIV prevention in the U.S. In New York City in 1990 there were 321 cases of perinatal transmission. In 2003, there were only five cases.<sup>1</sup>

## Prevention

At the same time that it has improved the experience of living with HIV, the existence of treatments that slow the progression of HIV infection to AIDS, combined with the lowered visibility of the ravages of AIDS, have contributed to complacency about HIV prevention. While scientists are researching biochemical prevention methods such as vaccines and microbicides, these are many years from availability.

Prevention remains critical. Major current prevention efforts and recommendations include:

- Preventing sexual transmission.
  - Abstinence from behaviors that can transmit HIV provides the surest protection against transmission of HIV and other STIs.
  - Consistent and correct use of a barrier method for each sexual act that can transmit HIV. Recommendations include the use of a male latex condom (polyurethane male condom in the case of latex allergies), or female condom, as a barrier against exchange of body fluids. Lambskin condoms should not be used, as the skin contains tiny pores through which potentially infected fluid can pass.
- Preventing transmission through exposure to blood.
  - Abstaining from illegal drug use, especially from practices that can transmit HIV and other bloodborne infections.
  - Seeking counseling or treatment for drug use, in order to cease or minimize drug use.
  - If continuing to inject drugs, using practices to reduce risk. These include:
    - Using a new, sterile syringe for every injection. Sterile syringes may now be purchased without prescription in pharmacies in New York State, and syringe exchange programs provide them free of charge.
    - If syringes must be re-used, they must be sterilized before use.
  - Using universal precautions during contact with or cleaning of blood or infectious materials in medical and household settings, including the use of latex gloves, disposable syringes, and disinfectant, and other infection-control procedures, such as masks and sterilization equipment as necessary.
- Preventing perinatal transmission.
  - Seeking prenatal care so that pregnant HIV-positive women can be identified. They can then be offered treatment that will prevent transmission to the child and can be encouraged to use formula to prevent transmission via breast milk.

Prevention in all areas increasingly recognizes the role of individuals in taking responsibility not only for themselves but also for their partners.

<sup>1</sup> Pediatric and Adolescent HIV/AIDS Surveillance Update (December 2004).

## Role of HIV Testing

As effective treatment has evolved, the importance of HIV testing has increased. Only by knowing their HIV status can people seek treatment early in the course of HIV infection, and decide with their physicians when treatment would be most effective. In New York City, HIV testing is widely available and is governed (in all settings) by specific New York State Department of Health regulations. Several types of testing are available. They involve using different types of specimens, methods of collection, and waiting time to receive results.

Anonymous and confidential testing are both available. In anonymous testing, only a number identifies the person being tested; the person's name is not placed in any records of the test or in any test results. In confidential testing a record of the test and of the results are placed in the person's medical chart. Although a named record of the person is kept, this information is maintained under strict privacy regulations and is only released to specific governmental agencies under very narrow circumstances for public health purposes.

Because of the complexities of testing, adolescents should be encouraged to make careful and informed decisions about whether, when, and how to be tested and disclose results. If possible, they should seek out a testing facility where the staff is experienced with adolescents.

There is no specific age of consent for HIV testing in New York State. Rather, the person administering the test must assess the person's "capacity to consent" individually.

## HIV/AIDS Is a Global Issue

The HIV/AIDS epidemic has affected every continent, and looms over countries that once imagined that they might be immune to its devastation. Geography does not confer immunity. All people are equally vulnerable, equally in need of knowledge about how to avoid infection, and how to care for those who could not. Everywhere, the behaviors that put people at risk are the same: injection or transfusion of infected blood (outside the U.S., in countries where the blood supply may not be adequately protected), sexual intercourse with an infected partner, and being born to or receiving breast milk from an infected woman.

The populations with the largest numbers and proportion of HIV infection are in Sub-Saharan Africa; the fastest-growing HIV epidemic is in India, South Asia, and the Far East. Eastern Europe and the former Soviet Union also are seeing rapid growth of HIV. The spread of the epidemic has created major global challenges of loss of human life, disruption of families, loss of the workforce, poor access to HIV treatment, and lack of resources for prevention.

## Advances in Treatment

There is no "cure" for HIV; the infection remains in the body indefinitely. However, new generations of medications, called antiretrovirals, that have revolutionized the treatment of HIV infection, have been available since about 1995. These antiretroviral medications strengthen the immune system by stabilizing or increasing the number of CD4 cells and also by significantly reducing the ability of HIV to copy itself (that is, to spread) within an infected person's body. However, they have many unpleasant and even dangerous side effects and HIV may become resistant to them. It is important for people with HIV to be seen regularly by their HIV medical provider.

Researchers are also studying how different populations respond to HIV treatments. For example, infants, adolescents, and older people may require different dosages and types of HIV-related medications because of the physiological changes that occur throughout life, periods of rapid growth, and the relative health of the immune system prior to infection.

Antiretroviral therapy has extended life expectancy of many people being treated for HIV infection. HIV infection is increasingly comparable to some other "chronic" diseases. This has resulted in a new set of challenges around "living with HIV" for HIV-positive people, their friends and family, and their communities.

As a long-term disease affecting all areas of life, living with HIV is dramatically improved by a variety of supportive services that assure access to care, adherence to medications, and overall quality of life. Specially funded programs and providers ensure that access to HIV care and drugs is available to low-income, underinsured, and uninsured people.



## The Role of Schools and Communities

Schools can be an effective setting for educational and support services around HIV prevention and treatment. By stimulating awareness, providing factual information, training students in decision making and negotiating, reducing stigma, helping students learn to educate themselves and others, and evaluate information through resources such as the Internet, schools can be powerful influences not just on students, but indirectly on their entire communities.

The future of the HIV epidemic depends on both students and their communities. Much of the history of fighting the epidemic was created by individuals concerned about themselves and others, who organized grassroots efforts for mobilization and to provide services. This tradition continues in the form of the many community-based organizations that provide a great deal of prevention and treatment assistance.

## HIV/AIDS in Children and Adolescents

Adolescence is a period of intense physical and psychosocial changes, usually beginning and ending in the second decade of life....[T]he changes of puberty are a marvel of nature and a testimony to the intricacies and wonders of the human hormonal system.<sup>1</sup>

Adolescence is sometimes likened to infancy: During no other times in a person's life is growth so rapid and transforming. Adolescents (sometimes defined as individuals ages 13 to 21) often seem to veer between childhood naiveté and adult-like maturity. Some seem in little hurry to grow up, while others yearn to take on the responsibilities and privileges of adulthood. Some adolescents, perhaps lacking a protective family structure, feel they have no choice but to grow up fast and take care of themselves. Adolescents often feel concerned or confused about whether body changes and related emotional turbulence are normal.

The "tasks" of adolescence include learning to be independent of parents, developing strong relationships with peers, becoming comfortable with one's transforming body, developing sexual and vocational identities, and defining one's character and personality.

Adolescents seeking to define themselves often experiment with new behaviors. Their series of trials (and sometimes errors), along with parental and teacher guidance and peer input, shape the adults they will become. While exploring the world can be an exciting and rewarding part of growing up, engaging in risky sexual activity and using alcohol and other drugs can lead to HIV infection, STIs, or problems associated with substance use. Adolescents need to learn not only the risks involved with these behaviors, but also the skills (decision making, assertiveness, etc.) that will help them withstand negative peer pressure and make healthier choices.

<sup>1</sup> Lawrence S. Neinstein, M.D. *Adolescent Health Care: A Practical Guide*, 2nd edition. Urban & Schwarzenberg, Baltimore-Munich, 1991.

## Psychosocial Development of Adolescents<sup>1</sup>

TASK	EARLY ADOLESCENCE	MIDDLE ADOLESCENCE	LATE ADOLESCENCE
<b>Independence</b>	Less interest in parental activities	Peak of parental conflicts	Integration of parents' advice and values
<b>Body image</b>	Preoccupation with self and pubertal changes  Uncertainty about appearance	General acceptance of body  Concern over making body more attractive	Acceptance of pubertal changes
<b>Peers</b>	Intense relationships	Peak of peer involvement  Conformity with peer values  Increased sexual activity and experimentation	Peer group less important  More time spent in sharing intimate relationships
<b>Identity</b>	Increased cognition  Increased fantasy world  Idealistic vocational goals  Increased need for privacy  Lack of impulse control	Increased scope of feelings  Increased intellectual ability  Feelings of omnipotence  Risk-taking behavior	Practical, realistic vocational goals  Refinement of moral, religious, and sexual values  Ability to compromise and to set limits

Learning about community resources is crucial. Adolescents need to know where to obtain counseling and comprehensive health care, both preventive and therapeutic. Some have access to school-based clinics and independent multi-service centers dedicated to adolescent care. Yet the Society for Adolescent Medicine, in the position paper "Access to Health Care for Adolescents and Young Adults,"<sup>2</sup> identifies numerous "policies and programs that should be implemented to ensure that all adolescents have access to high quality, comprehensive health care."

By increasing adolescents' awareness of both wellness and health risks, schools can help guide them toward a life-long practice of healthier behaviors. Additionally, informed adolescents can become educated consumers of health-care, learning how to ask the right questions and how to obtain the services to which they are entitled.

<sup>1</sup> Lawrence S. Neinstein, M.D., *Adolescent Health Care: A Practical Guide*, 2nd Edition. Urban & Schwarzenbag. Baltimore-Munich, 1991.

<sup>2</sup> Society for Adolescent Medicine. Access to Health Care for Adolescents and Young Adults: Position Paper of the Society for Adolescent Medicine. [http://www.adolescenthealth.org/PositionPaper\\_Access\\_to\\_Health\\_Care\\_for\\_Adolescents.pdf](http://www.adolescenthealth.org/PositionPaper_Access_to_Health_Care_for_Adolescents.pdf), accessed Oct. 27, 2005.

The course of HIV infection in adolescents may differ from that of adults. Because HIV infection was not identified as an adolescent medical issue until nearly the second decade of the AIDS epidemic, standard clinical definitions of HIV infection in adults do not always apply to adolescents. For example, severe weight loss is a “classic” sign of symptomatic HIV infection and AIDS in adults. But in adolescents, a more pertinent way to identify weight change as a symptom is failure to gain weight if one is still growing, or weight loss of ten pounds or more if one has stopped growing and is not dieting.

Researchers are studying the rate at which HIV infection progresses to AIDS in adolescents. Just as the rate differs between young children and adults, adolescents may also prove to have their own distinct pattern. Similarly, adolescents may require particular dosages and types of AIDS-related medications because of the physiologic changes that occur during growth.

## **Skill Building for Adolescents**

Adolescents are continuously developing complex social and cognitive skills. Adolescents need to not only be able to identify risk, but to understand risk-reduction strategies, and to develop and practice the decision-making and communication skills to use them. These skills include effective decision-making, limit-setting, assertive communication, negotiation, and refusal.

# Various Effects of Sexual Activity In Youth

## 2003 New York City Youth Risk Behavior Survey Data (reported by students)<sup>1</sup>

- Almost half of public high school students are sexually active. Many report behaviors that put them at risk for HIV infection.
- Forty-eight percent of all New York City public high school students reported having had sex.
- More boys than girls reported having sex (55 percent versus 41 percent).
- Seventeen percent of high school students reported having had four or more sex partners.
- Five percent of students have been pregnant or gotten someone pregnant.
- One in four high school students who were sexually active did not use a condom during last sexual intercourse.

## New York City Youth Pregnancy Statistics<sup>2</sup>

	BIRTHS			TERMINATIONS (SPONTANEOUS AND INDUCED)			PREGNANCIES		
Age →	< 15	< 18	18-19	< 15	< 18	18-19	< 15	< 18	18-19
2003	122	2,991	5,840	542	6,087	9,047	664	9,078	14,887
2000	202	3,813	6,987	623	7,307	9,726	825	11,120	16,713

## New York City and National Sexually Transmitted Infections (STIs) and Youth Statistics

- Every year 4 million people under 20—about one in four sexually experienced teens—acquire an STI, including herpes, HPV (genital warts), chlamydia, gonorrhea, and HIV.<sup>3</sup>
- Chlamydia rates among 15-19 and 20-24 years-old females were higher than in any other age group reported in New York City in 2003.<sup>4</sup>
- Gonorrhea rates were higher among women ages 15 to 19 and men ages 20 to 24 than among other age groups reported in New York City in 2003.<sup>5</sup>
- The rate of new infections for herpes and HPV—both viral STIs—is typically highest during the late teens and early twenties.<sup>6</sup>
- Human papillomavirus (HPV), commonly known as genital warts, affects approximately 20 million people.<sup>7</sup> Certain types of HPV are associated with cervical cancer.
- Nationwide, at least 45 million people ages 12 and older, or one out of five adolescents and adults, have had genital herpes (HSV) infection.<sup>8</sup> Though herpes treatment is available, recurrent, painful outbreaks may occur for life.

<sup>1</sup> Fornek, ML, Thorpe, LE, Platt, R, Mostashari, F, Henning, K. Risky Business? Health Behaviors of New York City Public High School Students. *NYC Vital Signs* 2004: 3(2);1-4.

<sup>2</sup> New York City Department of Health and Mental Hygiene Bureau of Vital Statistics. *Summary of Vital Statistics 2003: The City of New York*. December 2004.

<sup>3</sup> American Social Health Association. *Sexually Transmitted Diseases in America: How Many Cases and at What Cost?* Menlo Park, CA: Kaiser Family Foundation, 1998.

<sup>4</sup> New York City Department of Health and Mental Hygiene Bureau of Sexually Transmitted Disease Control. *Quarterly Report*. 2004; Vol.2, No. 4.

<sup>5</sup> New York City Department of Health and Mental Hygiene Bureau of Sexually Transmitted Disease Control. *Quarterly Report*. 2004; Vol.2, No. 4.

<sup>6</sup> Stone KM, Karem, KL, Sternberg, MR. Seroprevalence of human papillomavirus type 16 infection in the United States. *J Infectious Dis*. 2002; 186:1396-402.

<sup>7</sup> [http://www.cdc.gov/std/HealthComm/fact\\_sheets.htm](http://www.cdc.gov/std/HealthComm/fact_sheets.htm).

<sup>8</sup> [http://www.cdc.gov/std/HealthComm/fact\\_sheets.htm](http://www.cdc.gov/std/HealthComm/fact_sheets.htm).

# AIDS In New York City, the United States, and Worldwide

## HIV/AIDS in New York City<sup>1</sup>

- The first cases of HIV were identified in 1981.
- An estimated 86,000 New Yorkers have died of AIDS since 1981.
- At the end of 2004, more than 147,000 New Yorkers had been diagnosed with AIDS, giving New York City the highest AIDS case rate in the country.
- In 2004, 3,653 people were diagnosed with HIV in New York City. Additionally, 4,330 persons received an AIDS diagnosis. 28% of new HIV diagnoses were made simultaneously with AIDS diagnoses.
- As of December 2004, there were 94,495 known and reported cases of HIV and AIDS in New York City. The New York City Department of Health and Mental Hygiene estimates that there are actually between 112,936 and 157,132 New Yorkers living with HIV or AIDS.
- 1.2% of New York City's population is HIV-positive.
- In June of 2000, New York State implemented a 1998 law that mandates named reporting of HIV infection and HIV-related laboratory and clinical events, which enables the New York City Department of Health and Mental Hygiene to better estimate the number of New Yorkers living with HIV or AIDS.
- Males account for 69.4% of known and reported cases.
- Females account for 31.5% of new HIV diagnoses.
- 24.4% of new HIV diagnoses were in people under age 29.
- 60.7% of new HIV diagnoses were in people age 30 to 49.
- Among men with known transmission risk, sex with men accounted for 69% of new HIV diagnoses in 2004. Heterosexual contact accounted for 18%, and injection drug use history accounted for 12%.
- Among women with known transmission risk, heterosexual contact accounted for 78% of new HIV diagnoses in 2004 and injection drug use history accounted for 19 %.
- African Americans constitute 44.4% of reported cases in New York City; Hispanics 31.8%; Whites 21.4%; Asian/Pacific Islanders 1.1%; and Other/Unknown 1.3%.
- There have been approximately 3,800 diagnoses of children with HIV/AIDS in New York City, 98% of whom were infected during pregnancy, labor, delivery, or breastfeeding. More than 1,400 of these children have died.
- Perinatal transmission (mother-to-child) has diminished significantly. In 2003, only 5 babies were born HIV-positive in New York City.

## United States<sup>2</sup>

- Approximately one out of four individuals with HIV do not know they are infected.
- The first U.S. cases of what would later be called AIDS were identified in June 1981.
- In 2003, HIV-related disease (including but not limited to AIDS) was the sixth leading cause of death among people ages 25 to 44, behind accidents, cancer, heart disease, and suicide and homicide.<sup>3</sup>
- In 2003, HIV-related disease (including but not limited to AIDS), was the tenth leading cause of death for those ages 15 to 24.<sup>4</sup>
- As of December 2003, there were more than 38,000 cumulative AIDS cases reported among those ages 13 to 24.
- As of December 2003, an estimated 524,000 Americans have died of AIDS, and more than 1 million are currently living with either HIV or AIDS.
- In the decade 1994-2004, the number of new HIV infections in the United States has remained constant at approximately 40,000 per year.<sup>5</sup>

- People of color now represent the majority (71%) of new HIV infections, new AIDS cases, and people living with AIDS in the United States.
- Women account for 27% of new infections in the United States. African-American women account for 67% of newly infected women.
- Men who have sex with men account for 45 percent of all new HIV/AIDS cases diagnosed in the United States.
- Four to five people per hour become infected with HIV in the United States (40,000 annually), and approximately two people die every hour (18,000 annually).

## Worldwide<sup>6</sup>

- The HIV/AIDS epidemic has already claimed more than 20 million lives and another 39 million people are currently estimated to be living with HIV/AIDS worldwide.
- HIV is the leading cause of death worldwide among those ages 15-59.
- In 2004, at least 39 million people were living with HIV.
- During 2004, an estimated 4.9 million people became newly infected with HIV, including only about 640,000 under the age of 15.
- 3.1 million people died of AIDS in 2004. Of these, more than half a million were children.
- Teens and young adults, particularly girls and young women, continue to be at the center of the epidemic. People ages 15-24 account for approximately half of new adult HIV infections.
- Sub-Saharan Africa is home to 64% (25.4 million) of people living with HIV/AIDS but approximately only 10% of the world's population.
- As of 2003, an estimated 8.2 million people in Asia are living with HIV/AIDS.
- It is estimated that prevention programs reach fewer than one in five of those who need them and that only 15% of people with HIV/AIDS in need of antiretroviral therapy in low and middle income countries have such access.
- By 2010, life expectancies in several highly-affected countries could drop to below 40 years, well below what they would have been without HIV/AIDS and below levels they had reached in the pre-AIDS era.

<sup>1</sup> New York City Department of Health and Mental Hygiene, HIV Epidemiology Program: HIV/AIDS Surveillance Statistics, 2004. (<http://www.nyc.gov/html/doh/html/dires/hivepi.shtml>)

<sup>2</sup> Unless otherwise noted, all data in this section can be found in the: HIV/AIDS Surveillance Report: HIV Infection and AIDS in the United States, 2003, Centers for Disease Control. ([www.cdc.gov/hiv/stats/2003SurveillanceReport.pdf](http://www.cdc.gov/hiv/stats/2003SurveillanceReport.pdf))

<sup>3</sup> Centers for Disease Control: National Vital Statistics Reports, Vol. 53, No. 15, February 28, 2005. ([www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53\\_15.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53_15.pdf))

<sup>4</sup> Ibid.

<sup>5</sup> Centers for Disease Control: HIV Prevention in the Third Decade Activities of CDC's Divisions of HIV/AIDS Prevention, 2004. ([www.cdc.gov/hiv/HIV\\_3rdDecade/PDF/the-third-decade.pdf](http://www.cdc.gov/hiv/HIV_3rdDecade/PDF/the-third-decade.pdf))

<sup>6</sup> Kaiser Family Foundation, HIV/AIDS Policy Fact Sheet: The Global HIV/AIDS Epidemic, September 2005. ([www.kff.org/hivaids/upload/3030-05.pdf](http://www.kff.org/hivaids/upload/3030-05.pdf))